

JOHN ELIAS BALDACCI

GOVERNOR

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

DAVID A. COLE

January 26, 2007 Subject: **Topsham** Pin No. 14062.11 **Amendment No. 5**

Dear Sir/Ms:

Please make the following changes to the Bid Documents:

In the Bid Book REMOVE "2006 Fair Minimum Wage Rates" one page total and REPLACE with "2007 Fair Minimum Wage Rates" one page total.

ADD "Special Provision Section 105 Scope of Work" dated January 22, 2007 one page total.

REMOVE the existing "Special Provision, Electrical Schedule and Details" updated in amendment # 4 dated January 16, 2007 one page total and REPLACE with the attached new Special Provision, Electrical Schedule and Details" dated January 25, 2007 four pages total.

In Division 13 "Pre-Engineered Metal Building System" from amendment # 4 dated January 10, 2007 in sub-section 2.04 titled: "Building Description" under item F. Roof Panels DELETE in its entirety number two that reads: "2. Interior: Smooth Steel". Make this change in pen and ink.

In Division 13 "Pre-Engineered Metal Building System" from amendment # 4 dated January 10, 2007 in sub-section 2.07 titled: "Panels General" under item D Finish, number 2. Color, within a. Interior: DELETE "the statement: "To match glazed masonry units" and REPLACE it with the word "white". Make this change in pen and ink.

In Division 13 "Pre-Engineered Metal Building System" from amendment # 4 dated January 10, 2007 DELETE in its entirety sub-section 2.20 titled "Mansard" Make this change in pen and ink.



In Division 13 "Pre-Engineered Metal Building System" from amendment # 4 dated January 10, 2007 DELETE in its entirety sub-section 2.21 titled "Internal Gutter". Make this change in pen and ink.

In Division 16 "Section 16401 Electrical Work" within sub-section 1.02 titled "Scope" which begins: "The work covered by this Section …" DELETE the following text: "addition and interior renovations". Make this change in pen and ink.

In Division 16 "Section 16401 Electrical Work" under sub-section 2.17 titled "Primary Power Service" DELETE the following text "relocated local utility power pole" and REPLACE it with the following: "the end of project 14062.10". Make this change in pen and ink.

On plan sheets:

On plan sheet A-5A titled "2nd Floor Mezzanene Foundation Plan & Section", in Section D-D DELETE the W6x9. Make this change in pen and ink.

DELETE any reference to f9 and RELACE it with a diameter symbol. Make these changes in pen and ink.

On plan sheets E-1 titled "Primary Electrical Plan" and P-1 titled "Sewer & Domestic Water Piping Plan & Details" DELETE labels that read "2-5"f9 PVC Electrical Conduit", "2"f9 Water Pipe CTS Plastic (Copper Size) to Street Main", 2"f9 Discharge Pipe CTS Plastic (Copper Size) to Street Manhole". DELETE the detail "Sewer Line Tie-In". Make these changes in pen and ink.

On plan sheet P-1 titled "Sewer & Domestic Water Piping Plan & Details" DELETE the Detail Drawing "Water Main Tap". Make this change in pen and ink.

On plan sheet P-2 titled "1st & 2nd Floor Waste Plumbing Plan and Details" DELETE the "Oil-Gas-Sand Trap Details" Drawing. Make this change in pen and ink.

On plan sheet P-2 titled "1st & 2nd Floor Waste Plumbing Plan and Details" DELETE the "Sewer Ejection Details" Drawing. Make this change in pen and ink.

On plan sheet PN-1 titled "Pneumatic Piping Plan" DELETE the paddle fans shown in the "First Floor Plan" Drawing.. Make this change in pen and ink.

On plan sheet V-2 titled "Circulation Fan Plan" under "Note" DELETE in its entirety Note 1 that begins: "Fans are located..." and REPLACE with the following new Note 1 that reads: "Fans are located as shown on the "First Floor Plan" at the elevation shown in "Section A-A". Fans will be on one 20 amp, single pole circuit with one speed controller for the front row and one speed controller for the back row. Speed controller shall be Leviton 6616 Variable Speed Controller, 5 amp rating or approved equivalent. The switch shall be located outside the lunch room." Make this change in pen and ink. The following questions have been received.

Question: Plan sheet PN-1 shows a 4 paddle fans while Plan sheet V-2 shows 6 paddle fans. The electrical drawings do not show any paddle fan connections or controls, please clarify. Who supplies the fans?

Response: See revisions to plan sheets PN -1 and V-2 earlier in this amendment. Fans may be supplied by the General Contractor or a subcontractor.

Question: On Plan Sheet E-1, it shows 2-5" F9 PVC electrical, what does F9 mean?

Response: See change earlier in this amendment deleting any reference to f9 and replacing it with a diameter symbol.

Question: The electrical plans call for the panel to be Cutler Hammer. Is Square D, General Electric, ITE or Westinghouse acceptable?

Response: Equivalents are acceptable.

Question: What is the amperage of the Sewer pump and the boiler?

Response: The sewer pump is a ³/₄ hp pump at 240 volts and both boilers require a 20 amp breaker. See notes 15 and 16 on plan sheet H-6A.

Question: The drawings show receptacles are not marked as GFCI, are GFCI breakers acceptable?

Response: No. GFCI breakers are not acceptable.

Question: Are there any specifications for the mechanical equipment? (Boiler, sewer pumps, HVAC, water heater, exhaust fans, air dryer, compressor)

Response: Specifications for equipment used on this project may be found on the plan sheets and in the specifications.

Question: Addendum #2, under 2.04, F.2 states "interior: smooth steel", does this mean the underside of the roof members are to have an interior steel panel fastened to it?

Response: See earlier change in this amendment. The roof does not require an interior panel.

Question: Addendum #2, under 2.07, p. 2a, states "to match glazed concrete masonry units". The drawings do not show any masonry units, please clarify.

Response: See revisions to Division 13 provided earlier in this amendment.

Question: Addendum #2, under 2.20 and 2.21, the drawing shows no mansard or interior gutters, please clarify.

Response: See revisions to Division 13 provided earlier in this amendment.

Question: Addendum #2 states the top of slab elevation is 92.1', what is the existing grade elevation?

Response: Top of granular borrow is approximately 2' below Finish Floor Grade.

Question: On drawing A-5A, section A-A calls for #4 rebar, what is the rebar pattern? (How many rows, O.C. each way?)

Response: The #4 rebar is to support the pipe sockets at each. The floor is reinforced with 66-W4x4.

Question: On drawing A-5A, section D-D, what is the w6x9 for? Please clarify.

Response: See earlier change in this amendment. The W6x9 is not needed.

Question: What is the distance from the building to the connection of existing underground utilities?

Response: See plans sheets 3 and 4 from Project 14062.10, the site work contract included in Amendment # 4.

Question: Addenda 2 has a Plumbing Fixture Schedule that includes a Mop Sink. I can not find any mop sinks shown on the drawings. There is also what appears to be a half round hand wash sink outside the Bath/Lunch Rooms. What is the spec for that?

Response: A mop sink and associated piping in the shop area are not shown on the drawings, they are added in Amendment # 4. The mop sink is listed on the Special Provision Plumbing Fixtures & Materials. The half round wash sink is listed on the Special Provision Plumbing Fixtures & Materials as Wash Fountain Bradley Classic Semi Circular with 9" deep bowl. See Special Provision Section 105 Scope of Work for clarification of work.

Question: The details on P-2 for the (A) Sewage Ejector and (B) Oil Gas Sand Trap as well as the first floor plan do not correlate.

Response: See change earlier in this amendment, Oil-Gas-Sand Trap Details and Sewage Ejector Drawings have been deleted.

Question: A-1C shows eye wash station – no spec and no piping shown to it.

Response: The eye wash is listed on the Special Provision Plumbing Fixtures & Materials included in amendment # 4. See Special Provision Section 105 Scope of Work added earlier in this amendment for clarification of work.

Question: A-1C shows Drinking Fountain – no spec and no piping shown to it.

Response: The drinking fountain is listed on the Special Provision Plumbing Fixtures & Materials included in amendment # 4. See Special Provision Section 105 Scope of Work added earlier in this amendment for clarification of work.

Question: There is no spec, sequence of operation or items shown for the Automatic Temp Control System noted in 1565 1.2 .I. There are also gas monitor sensors shown on V-3 with no spec or idea what they are supposed to do.

Response: See change made earlier in this amendment to Special Provision, Electrical Schedule and Details.

Consider these changes and information prior to submitting your bid on January 31, 2007.

Sincergly,

Scott Bickford Contracts & Specifications Engineer

State of Maine Department of Labor Bureau of Labor Standards Technical Services Division Augusta, Maine 04333-0045 Telephone (207) 624-6445

Wage Determination - In accordance with 26 MRSA §1301 et seq this is a determination by the Bureau of Labor Standards of the fair minimum wage rate to be paid laborers and workers employed on the below titled project

Title of Project ----- Highway Maintenance Garage

Location of Project -- Topsham, Maine in Sagadahoc County

2007 Fair Minimum Wage Rates Building 2 Sagadahoc County (other than 1 or 2 family homes)

	Minimum	Minimum			Minimum	Minimum	
Occupation Title	<u>Waqe</u>	Benefit	Total	Occupation Title	Wage	Benefit	Total
Asbestos Abatement Wrkr	\$15 00	\$0 83	\$15 83	Ironworker - Reinforcing \$18.00		\$10 00	\$28 00
Assembler - Metal Bidg	\$12 00	\$3 32	\$15 32	Ironworker - Structural	\$17 00	\$3 01	\$20 01
Backhoe Loader Operator	\$14 00	\$2 24	\$16 24	Laborers/Helper/Tender	\$12 50	\$1 52	\$14 02
Boilermaker	\$19 75	\$4 21	\$23 96	Laborer - Skilled	\$14 00	\$0 78	\$14 78
Boom Truck Operator	\$16 50	\$2 66	\$19 16	Loader Op - Front End	\$14 75	\$2 28	\$17 03
Bricklayer	\$21 43	\$2 61	\$24 04	Mechanic - Maintenance	\$19 34	\$2 73	\$22 07
Bulldozer Operator	\$16 00	\$2 87	\$18 87	Mechanic - Refrigeration	hanic - Refrigeration \$20 19		\$24 67
Cable Splicer	\$20 25	\$3 35	\$23 60	Millwright	\$21 00	\$11 15	\$32 15
Carpenter	\$17 50	\$2 60	\$20 10	Oil/Fuel Burner Serv & Instr	\$18 50	\$6 09	\$24 59
Carpenter Acoustical	\$13 00	\$ 2 15	\$15 15	Painter	\$12 00	\$ 1 55	\$13 55
Carpenter - Rough	\$13 63	\$2 52	\$16 15	Paperhanger	\$13 00	\$0 00	\$13 00
Cement Mason/Finisher	\$15 00	\$1 16	\$16 16	Paver - Bituminous	\$14 88	\$1 27	\$16 15
Commun Equip Installer	\$20 88	\$4 02	\$24 90	Pile Driver Operator	\$19 00	\$5 55	\$24 55
Concrete Mixing Plant Op	\$14 55	\$3 70	\$18 25	Pipe/Stm/Sprkler Fitter	\$19 00	\$4 35	\$23 35
Concrete Pump Operator	\$18 25	\$2 45	\$20 70	Pipelayer	\$20 75	\$5 45	\$26 20
Crane Operator =>15 Tons	\$19 50	\$ 4 70	\$24 20	Plumber (Licensed)	\$20 60	\$4 39	\$24 99
Crusher Plant Operator	\$14 48	\$3 27	\$17 75	Plumber Hlpr/Trainee (Lic)	\$13 50	\$2 47	\$15 97
Diver	\$21 00	\$0 75	\$21 75	Roller Operator - Earth	\$12 43	\$4 49	\$16 92
Dniler - Well	\$13 00	\$1 94	\$14 94	Roofer	\$14 00	\$1 45	\$15 45
Dry-Wall Applicator	\$20 63	\$0.00	\$20 63	Screed Operator	\$15 50	\$3 42	\$18 92
Dry Wall Taper & Finisher	\$18 00	\$0 89	\$18 89	Sheet Metal Worker	\$16 25	\$3 38	\$19 63
Electrician	\$20 25	\$6 20	\$26 45	Sider	\$14 00	\$0 60	\$14 60
Electrician Hipr (Licensed)	\$13 99	\$ 1 79	\$15 78	Stone Mason	\$16 24	\$2 04	\$18 28
Elevator Constrctr/Installer	\$40 32	\$14 77	\$55 09	Tile Setter	\$17 00	\$3 14	\$20 14
Excavator Operator	\$14 50	\$2 26	\$16 76	Truck Driver Light	\$13 25	\$0 98	\$14 23
Fence Setter	\$12 50	\$1 08	\$13 58	Truck Driver - Medium	\$11 38	\$0 71	\$12 09
Floor Layer	\$15 00	\$1 35	\$16 35	Truck Driver - Heavy	\$13 00	\$2 10	\$15 10
Glazier	\$13 75	\$1 97	\$15 72	Truck Driver - Tractor Trailer	\$12 95	\$ 2 10	\$15 05
Insulation Installer	\$15.00	\$1.85	\$16.85				

The Laborer classifications include a wide range of work duties Therefore, if any specific occupation to be employed on this project is not listed in this determination, call the Bureau of Labor Standards at the above number for further clarification

Welders are classified in the trade to which the welding is incidental

Apprentices - The minimum wage rate for registered apprentices are those set forth in the standards and policies of the Maine State Apprenticeship and Training Council for approved apprenticeship programs

Posting of Schedule - Posting of this schedule is required in accordance with 26 MRSA §1301 et seq , by any contractor holding a State contract for construction valued at \$50,000 or more and any subcontractors to such a contractor

Appeal - Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates with the Secretary of State

Determination No

Expiration Date

Filing Date

12-31-2007

B2-009-2007

BLS 424BU (R2007) (Building 2 Sagadahoc)

A true copy Attest Witham A Peabdev

Director Bureau of Labor Standards

Topsham 14062.11 Highway Maintenance Garage January 22, 2007

SPECIAL PROVISION SECTION 105 Scope of Work

<u>Description</u> The plans and specifications are not intended to completely detail the work. The Contractor shall submit the necessary information to detail the building design, the construction of the building and the associated work in accordance with the contract documents.

The Contractor shall refer to the contract documents for a full description of the extent of the work to be performed.

Many portions of the drawings are diagrammatic such as electrical, plumbing and mechanical and are not intended to show every detail of construction or the exact location of equipment but the general arrangement and extent of the work to be performed. Where building construction makes it advisable or necessary to change the location of equipment, the Subcontractor shall perform such work without cost to the Owner on written request of the Engineer. Any doubt as to the intended location of the equipment shall be resolved by the Engineer before proceeding with the installation.

The intent is to obtain an installation of all systems and equipment, complete in every detail within and about the building, and with all facilities properly interconnected with power, plumbing and telephone. The Contractor shall submit to the Department all shop drawings and information necessary to demonstrate the details of construction and design. The Contractor shall furnish and install all such parts as may be necessary to complete the system in accordance with the best trade practice, applicable codes, and to the satisfaction of the Engineer. Upon completion, the systems and all equipment throughout the structures shall operate properly and function as intended.

Topsham 14062.11 Highway Maintenance Garage January 16, 2007

SPECIAL PROVISION ELECTRICAL SCHEDULE AND DETAILS

The following materials or approved equal shall be furnished and installed.

Electrical Service shall be 240 volt, single phase, 400amp.

There shall be two panels.

All wiring, boxes, fixtures, etc. within the wash bay and adjacent to wash bay shall be suitable for a wet location.

Receptacles shall be GFCI.

Exit signs are to be 120 volt with battery backup LED type.

Manufacturer	Catalog	Description	Mounting	Voltage	Watts	Туре	Notes
	Series						
	Number						
METALUX	8TVT2 - 232 - DR - 120 - EB8 - WL	8" Vapor Tight Industrial	chain	110	32	T8 3000K	1
LUMARK	MHHBPD22M - 400MT	High Bay Fixture	pendant	240	400	MH	
LUMARK	MHHBPD22M - 400MT - EM	High Bay Fixture	pendant	240	400	MH	2

LUMINAIRE SCHEDULE

(1) FIXTURE HAS 2 LAMPS IN CROSS SECTION

(2) QUARTZ RESTRIKE SHALL BE 100W

Panelboards

- 1. Provide standard manufacturer products. All components of panelboards shall be the product and assembly of the same manufacturer. All similar units of all panelboards shall be of the same manufacturer.
- 2. All panels shall be dead front safety type.
- 3. All panelboards shall be completely factory assembled with molded case circuit breakers.
- 4. Panels shall have main breaker or main lugs, bus size, voltage, phase, and flush or surface mounting all as scheduled on the drawings.
- 5. Panelboards shall have the following features:
 - a. Non-reduced size copper or aluminum bus bars and connection straps bolted together and rigidly supported on molded insulators. Bus bar taps shall be arranged for sequence phasing of branch circuit devices.
 - b. Full size neutral bar mounted on insulated supports.
 - c. Ground bar with sufficient terminals for all grounding wires. The ground bar shall be insulated and isolated where called for on the drawings.
 - d. Buses braced for the available short-circuit current, but not less than indicated on the drawings and never less than 10,000 amperes symmetrical. All panelboards shall be fully rated. Series rating is not allowed.
 - e. All breakers arranged so that it will be possible to substitute a twopole breaker for two single pole breakers when frame size is 100 amperes or less.
 - f. Design interior so that protective devices can be replaced without removing adjacent units, main bus connectors and without drilling or tapping.
 - g. Unused circuit breaker spaces shall include all necessary bussing, device supports and connections required for future installation of 100-ampere frame size circuit breakers. Provide blank cover for each space.
 - h. Provide galvanized steel cabinets to house panelboards. Cabinets for panelboards may be factory primed and suitably treated with a corrosion-resisting paint finish meeting UL standard for outdoor applications.

- i. Back and sides shall be of one-piece formed steel. Cabinets for panelboards may be of formed sheet steel with end and side panels welded, riveted or bolted as required.
- j. Provide minimum of four interior mounted studs and necessary hardware for in and out adjustment of panel interior.
- k. Fabricate trim of sheet steel consisting of frame with door attached by concealed hinges. Provide flush or surface trim as shown on the drawings.
- 1. Surface trim shall have the same width and height as the box.
- m. Provide doors with flush type latch and manufacturer's standard lock.
- n. In making switching devices accessible, doors shall not uncover any live parts.
- o. Provide concealed butt hinges welded to the doors and trims.
- p. Provide keyed alike system for all panelboards.
- q. Provide a directory card, metal holder, and transparent cover. Permanently mount holders on inside of doors.
- r. Circuit breakers in panelboards shall be bolt on type on phase bus bar or branch circuit bar. Molded case circuit breakers shall have automatic, trip free, non-adjustable, inverse time, and instantaneous magnetic trips.

Carbon Monoxide Gas Monitor/Transmitter

- 1. Provide and install a microprocessor-based system for continuous monitoring of carbon monoxide in the garage bay. Unit shall be Kele, GMT series monitor/transmitter or approved equal.
- 2. Monitoring system shall include an electro-chemical sensor capable of detecting a range of carbon monoxide of 0-500 ppm. An output signal of 0-4 mA shall be proportionate to the level of carbon monoxide present. The unit shall come equipped with a factory calibrated, DPDT alarm relay set at 35 ppm (adjustable), wired to a 10-step LED indicator.
- 3. Sensors shall be located 3-5 feet above the finish floor in a protected location to avoid damage.
- 4. Contractor shall provide and install all devices, wiring, etc. as necessary to satisfy the power requirements of the unit.
- 5. Operation: Upon sensing a time weighted average carbon monoxide level of 25 ppm, the unit shall activate a control relay which will energize fans. Once

carbon monoxide levels drop below 10 ppm the relay will de-energize fans. Upon rise to 35 ppm, an audible alarm shall sound, instantaneously.

6. Install number of sensors required by the manufacturer to provide complete coverage of the maintenance area.

Nitrogen Dioxide Gas Monitor/Transmitter

- 1. Provide a microprocessor-based system for continuous monitoring of nitrogen dioxide in the garage bays. Unit(s) shall be Kele, GMT series monitor/transmitter or approved equal.
- 2. Monitoring system shall include an electro-chemical sensor capable of detecting a range of nitrogen dioxide of 0-10 ppm. An output signal of 0-4 mA shall be proportionate to the level of nitrogen dioxide present. The unit shall come equipped with a factory calibrated, DPDT alarm relay set at 5 ppm (adjustable), wired to a 10-step LED indicator.
- 3. Sensors shall be located 3 feet below the ceiling in a protected location to avoid damage.
- 4. Contractor shall provide and install all devices, wiring, etc. as necessary to satisfy the power requirements of the unit.
- 5. Operation: Upon sensing a time weighted average nitrogen dioxide level of 3 ppm, the unit shall activate a control relay which will energize fans. Once the level of nitrogen dioxide drops below 1 ppm the relay will de-energize fans. Upon rise to 5 ppm, an audible alarm shall sound, instantaneously.
- 6. Install number of sensors required by the manufacturer to provide complete coverage of the maintenance area.